

**Texas Department of State Health Services (DSHS)**  
**Occupational Health and Safety Surveillance Project (OHSSP)**  
**Annual Report of Major Outputs and Outcomes**  
**July 1, 2012 – June 30, 2013**

**Fundamental Surveillance**

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**Program Overview and Overall Aims**

The state-based occupational health and safety surveillance system is intended to provide information essential to protecting workers by determining underlying causes of injuries and illnesses in the workplace, investigating workplace practices, directing intervention strategies, and evaluating the effectiveness of those strategies.

The overall aims of the Texas Fundamental program are to:

- Annually compile and report data for 20 occupational health indicators (OHIs).
- Identify patterns and trends for the OHIs.
- Develop and utilize alternative data sources to identify potential occupational illnesses and injuries.
- Train and educate health professionals and workers to enhance awareness and prevention of workplace injuries and illnesses.
- Review, evaluate, and improve processes for the surveillance of occupational health and safety data in Texas.

**Major Accomplishments & Outcomes**

**Potential Outcomes:**

- Compiled and reported 2010 OHI data for 19 of 20 indicators to CSTE/NIOSH in June, 2013. Hospital discharge data and mortality data needed to calculate specific 2010 indicators was successfully obtained to meet our goal.
- Examined trends in fatal occupational injuries in Texas 2006-2010 with emphasis on industry and occupation.
- Examined annual age-adjusted rates of asbestosis and silicosis in Texas Health Status Report for year 2004 – 2009 using hospital discharge data and mortality data.
- Created Silicosis Occupational Incidence report for 2004 – 2009 data; uploaded to Asbestosis and Silicosis program webpages.

- Analyzed pesticide exposure data; created Texas maps of pesticide exposure by county for program webpage with 2000 – 2010 data.
- Carried out occupational pesticide exposure follow up, interviews, and medical record reviews on 129 reported cases, resulting in the following classification: Definite 19%; Probable 9%; Possible 28%; Suspicious 11%; Insufficient Information 25%, Exposed/Asymptomatic 8%.
- Assessed Texas poison center call data to identify work-related health emergency cases due to hydrofluoric acid exposures between 2000 and 2010.
- Reviewed and evaluated surveillance system process through regular staff meetings with the occupational safety and health surveillance team.
- Simplified the process of generating the Profile of Employment Demographics by automating the calculations of the required profile elements using a new Excel data entry sheet. Required data values are entered into designated cells, and all the required profile elements are calculated automatically according to the methods outlined in the How-to-Guide. The new Data Entry spreadsheet can be used as a template for each successive year of data.
- Developed new case-finding methods, using additional hospital discharge database fields, thereby improving identification of work-related hospitalizations by approximately 22%.
- As of July 31, 2013 the ABLES Program received 23,665 blood lead test results from July 1, 2012 to June 30, 2013. Of these reports, 2,981 are associated with workplace exposures (1,881 were < 10 µg/dL, 778 were 10-24 µg/dL, 268 were 25-39 µg/dL, and 54 were ≥ 40). In conjunction with NIOSH's case definition, the Texas ABLES program conducts follow-up activities on individuals with blood lead levels at or above 10 µg/dL.

#### **Intermediate Outcomes:**

- Provided information and held educational sessions on the OHIs and occupational pesticide exposure surveillance across Texas to a variety of stakeholders / audiences (e.g., presentations, health fairs, mail-outs).
- Updated Texas postings onto the NIOSH state-based occupational health RSS clearinghouse.
- Participated in Western States meeting in Denver, September 2012, and in the Occupational Health Surveillance Partners' Meeting in Tampa, December 2012.
- Created Spanish language OHI webpage translating content from the Texas English version OHI webpage; included were links to valuable Spanish version resources from other organizations and agencies that also target the Spanish-speaking workforce.
- Added and updated content for OHI and acute occupational pesticide exposure webpages.

#### **Significant Outputs**

##### **Publications:**

Forrester MB, Prosperie S, Gardner M. Poison center calls related to water treatment facilities. Clin Toxicol (Phila) 2012; 50:665.

Forrester MB. Work-related health emergency cases due to hydrofluoric acid exposures reported to Texas poison centers. *Int J Occup Med Environ Health* 2012; 25:456-462.

Kasner EJ, Keralis JM, Mehler L, Beckman J, Bonnar-Prado J, Lee SJ, Diebolt-Brown B, Mulay P, Lackovic M, Waltz J, Schwartz A, Mitchell Y, Moraga-McHaley S, Roisman R, Gergely R, Calvert GM. Gender differences in acute pesticide-related illnesses and injuries among farmworkers in the United States, 1998-2007. *Am J Ind Med* 2012; 55:571-583.

Hudson, N. L., Kasner, E. J., Beckman, J., Mehler, L., Schwartz, A., Higgins, S., Bonnar-Prado, J., Lackovic, M., Mulay, P., Mitchell, Y., Larios, L., Walker, R., Waltz, J., Moraga-McHaley, S., Roisman, R. and Calvert, G. M. (2013), "Characteristics and magnitude of acute pesticide-related illnesses and injuries associated with pyrethrin and pyrethroid exposures—11 states, 2000–2008". *Am J Ind Med*. doi: 10.1002/ajim.22216.

#### **Presentations:**

<b>Date</b>	<b>Presentation Title/Subject</b>	<b>Audience</b>
11/6/2012	The Occupational Health Indicators	Public health professionals from various agencies - Austin, TX
12/4/2012	Texas Poison Center Network as infrastructure to pesticide exposure surveillance data collection	Public health professionals from various agencies - Austin, TX
1/7/2013	Texas Poison Center Network as infrastructure to pesticide exposure surveillance data collection	Public health epidemiologists from various programs - Austin, TX
4/23/2013	The Occupational Health Indicators and Pesticide Exposure Surveillance	Birth Defects Program epidemiologists - Austin, TX

#### **Health Fairs and Internet Presence:**

08-06-12 – OHI Educational Display at Healthy Texas Babies Conference.

03-11-13 – Created Spanish language Occupational Health Indicators webpage.

04-15-13 – OHI Educational Display at Texas Dept. of Insurance Safety Summit.

06-05-13 – OHI Educational Display at City of Austin Safety Health Fair.

#### **Partnerships:**

05-10-13 – Established collaboration with Migrant Clinician's Network to help address and improve pesticide exposure underreporting of farmworkers.